

Package: waschoolpiracema (via r-universe)

September 24, 2026

Title WASH in Schools in Piracema, Brazil

Version 0.0.1

Description The main goal of this study was to describe the profile of schools from the basic education system in the municipality of Piracema (Minas Gerais, Brazil). Moreover, we also aimed to compare the characteristics of schools, with a special concern to WASH, pre- (2020), peri- (2021) and post-COVID-19 pandemic (2022) to evaluate to what extend schools in Piracema made progress in providing WASH since the beginning of the COVID-19 pandemic. This study is a sub-project of a PhD project and an initial study comparing the BNSC from 2020 and 2021 has already been conducted and published by the author of this project (for more details see references). Findings will be essential for the next phase of the research, which will be the collection of primary data in schools in the municipality of Piracema through qualitative methods (interviews, on-spot observations and art-based research).

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Language en-GB

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URL <https://github.com/openwashdata/waschoolpiracema>

BugReports <https://github.com/openwashdata/waschoolpiracema/issues>

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Description

Since 2014 INEP (Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira), the Brazilian government entity responsible for the surveillance of schools, has been collecting and releasing information on an annual basis on the infrastructure of all basic education institutions in the country, regardless of the level of education, locality (rural vs urban) and management model (private or public) (INEP, 2021). Every year, the school’s principals, headteachers, or the person in charge must reply to a self-reported survey sent by the INEP. The questionnaire contains 62 questions and should be filled out between June and August, considering the last Wednesday of May as the reference date for data collection (INEP, 2021). The final results are released at the end of January and the beginning of February from the following year. For the year 2020, due to the extraordinary situation of the COVID-19 pandemic, the reference date for collecting the data was postponed to March 11 2020, one day before the national closure of schools was established. Hence, the 2020 BNSC dataset describes the state of schools’ infrastructure in Brazil right before they were closed. For 2021 and 2022, the reference date for data collection returned to the original standard (last Wednesday of May of 2021 and 2022). Thus, the 2021 BNSC, which were released on February 18 2022 reflect the impacts of the pandemic and the school closure on the state of schools’ infrastructure in Brazil, while the 2022 BNSC released on and February 08 2023 indicates the situation of schools at the end of the pandemic. We adopted the word "pre" to designate the state of schools before the beginning of the pandemic (2020 BNSC), "peri" to refer to the state of schools during the pandemic (2021 BNSC) and "post" to indicate the conditions of schools moving forward from the COVID-19 pandemic (at the end of the pandemic).

Usage

waschoolpiracema

Format

A tibble with 21 rows and 36 variables

year Year of Survey

sch_id Numerical code of the school

admin The administration of the school is federal (1); state (2); municipal (3), or private (4).
Federal, state, and municipal schools are considered public.

loc The school is located in an urban (1) or rural area (2)

drink_water The school provides drinking water with quality suitable for human consumption (i.e., ingestion, preparation, and production of food) according to the Brazilian national water quality standards (former Portaria nº 2.914/2011 now Portaria de Consolidação nº5/2017)

public_water The water in the school is supplied by a public network .

borehole_water The water in the school is supplied by a borehole

well_water The water in the school is supplied by a cacimba, cistern, or well

surface_water The water in the school is supplied by surface water source

no_water There is no water supply in the school

sewage_rede_publica The school dispose their sewage into a public sewerage system

sewage_fossa_septica The school dispose their sewage into septic tank

waste_servico_coleta The solid waste in the school is regularly collected by the public cleaning service

waste_queima The solid waste in the school is burned or incinerated

waste_enterra The solid waste in the school is buried

waste_destino_final_publico The solid waste in the school is disposed in an area licensed by environmental agencies, intended to receive solid waste in a planned manner (e.g., landfills)

waste_descarta_outra_area The solid waste in the school is disposed in another area (none of the other options)

sanitary The school is equipped with sanitary facilities for personal hygiene/physiological needs

sanitary_ei The school is equipped with sanitary facilities for children 0 to 5 years old

sanitary_pne The school is equipped with disability-friendly sanitary facilities following the national guidelines (ABNT - NBR 9050)

sanitary_funcionarios The school is equipped with sanitary facilities for personal hygiene/physiological needs exclusively for staff

sanitary_chuveiro The school is equipped with sanitary facilities or changing room or washing room with appropriate equipment (shower) for bathing, exclusively for students

qt_mat_bas Total number of students per school

pc_girl Percentage of girls per school

pc_boy Percentage of boys per school

pc_white Percentage of students that are classified or self-identified as white race/skin color per school

pc_brown Percentage of students that are classified or self-identified as brown race/skin color per school

pc_black Percentage of students that are classified or self-identified as black race/skin color per school

pc_indian Percentage of students that are classified or self-identified as indigenous race/skin color per school

pc_asian Percentage of students that are classified or self-identified as Asian race/skin color per school

pc_nd Percentage of students that did not declared race/skin color per school

pc_cre Percentage of students in daycare (0 - 3 years old)

pc_pre Percentage of students in preschool (4 - 5 years old)

pc_prim_1 Percentage of students in primary education first cycle (6 - 10 years old)

pc_prim_2 Percentage of students in primary education second cycle (11 - 14 years old)

pc_sec Percentage of students in secondary education (15 - 18 years old)

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* **datasets**

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